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34030				Application Number	09/883,033			
	PPLEMEN			Filing Date	June 15, 2001			
	FORMATION			First Named Inventor	Jean-Pierre Sommadossi et al.			
STATEMENT BY APPLICANT				Group Art Unit	1623			
	(use as man	y sheets as necess	sarv)	Examiner Name	Howard V. Owens, Jr.			
Sheet	2	of	9	Attorney Docket Number	06171.105026 (IDX 1005 US)			

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Examiner Initials *	Cite No. 1	For Office 3		nent d Code ² known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document DD-MM-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	J _e
		wo	89/02733		University of California	04-06-1989		
		wo	89/03838	Al	Pro-neuron, Inc.	05-05-1989		
		wo	90/00555		Vical, Inc.	01-25-1990		
		wo	91/16920		Vical, Inc.	11-14-1991		
	,	wo	91/18914		Vical, Inc.	12-12-1991		\coprod
		wo	91/19721		Glazier	12-26-1991		
		wo	92/01138		Yatvin	01-20-1994		
		wo	92/08727					
		wo	92/15308		Wellcome	09-17-1992		
		wo	92/18517		Yale et al.	10-29-1992		
		wo	93/00910		Vical, Inc.	01-21-1993	*	
		wo	94/20523		Burroughs Wellcome	09-15-1994		
	ļ	wo	94/26273		Hostetler	11-24-1994		
-2-	<u> </u>	wo	94/29331		Sloan-Kettering Inst. for Cancer Research	12-22-1994		
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	3	wo	96/11204		Matthes & Von Jenta-Lipinski	04-18-1996		
	1	wo	96/13512		Genencor	05-09-1996		
		wo	96/15132		University of California	05-23-1996		
		wo	96/40164		Emory University	12-19-1996		
	1	wo	98/15563		Pankiewicz, K.W. et al	10-09-1997		
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	 	EP	0 352 248		Medivir Aktiebolag	01-24-1990		
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		EP	0 494 1	19	BioChem Pharma	07-08-1992	*	
		JР	06-2936	45	Saneyoshi et al.	10-21-1994		

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
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-8-		ARNER and ERIKSSON, "Mammalian Deoxyribonucleoside Kinases," Pharm. Ther., 1995, 67(2), 155-186.	
		BERK et al., "A Genetically Distinct Tymidine Kinase in Mammalian Mitochondria," <u>J Biol Chem</u> , 1973, 248, 2722-2729.	
		BESTWICK et al., "Selective Expansion of Mitochondrial Nucleoside Triphosphate Pools in Antimetabolite-treated HeLa Cells," J Biol Chem, 1982, 257, 9300-9304.	
		BLOCH, et al. "The Role Of The 5'-Hydroxyl Group Of Adenosine In Determining Substrate Specificity For Adenosine Deaminase." J. Med. Chem. 10(5), 908-12 (September 1967).	×
		BRIDGES et al., "Characterization of a dCTP Transport Activity Reconstituted from Human Mitochondria," J. Biol. Chem, February 19, 1999, 274(8), 4620-4625.	
		BRIDGES et al., "Identification of a novel mitochondrial dNTP carrier and its interaction with anti-HIV nucleoside analogs," Proc. Am. Assoc. Cancer Res., March 1997, 38, 414.	
		BRIDGES et al., "Inhibition of Mammalian DNA Polymerase-Associated 3' to 5' Exonuclease Activity by 5'-Monophosphates of 3'-Azido-3'-Deoxythymine and 3'-Amino-3'-Deoxythymidine," <u>Biochemical Pharmacology</u> , 1993, 45(8), 1571-1576.	
		BRYANT et al., "Antiviral L-Nucleosides Specific for Hepatitis B Virus Infection," Antimicrobial Agents and Chemotherapy, 45(1), 229-235 (January 2001).	
		CHANG et al., "Biochemical Pharmacology of (+)- and (-)-2',3'-Dideoxy-3'-thiacytidine as Anti-hepatitis B Virus Agents," J Biol Chem, November 5, 1992, 267(31), 22414-22420.	

Examiner Date Considered		

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		CHANG, et al., "Deoxycytidine Deaminase-resistant Stereoisomer is the Active Form of (-)-2',3'-thiacytidine in the Inhibition of Hepatitis B Virus Replication," <i>Journal of Biological Chemistry</i> , Volume 267(20), 13938-13942 (July 15, 1992).	
*		CHARIOT et al., "Zidovudine-induced mitochondrial disorder with massive liver steatosis myopathy, lactic acidosis, and mitochondrial DNA depletion," J. Hepatology, 1999, 30, 156-160.	
		CHEN et al., "Characterization of Pyrimidine Deoxyribonucleoside Kinase (Thymidine Kinase) and Thymidylate Kinase as a Multifunctional Enzyme in Cells Transformed by Herpes Simplex Virus Type 1 and in Cells Infected with Mutant Strains of Herpes Simplex Virus," J Virol, June 1979, 30, 942-945.	
	-	CHEN et al., "Delayed Cytotoxicity and Selective Loss of Mitochondrial DNA in Cells Treated with the Anti-human Immunodeficiency Virus Compound 2',3'-Dideoxycytidine," J Biol Chem, 1989, 264, 11934-11937.	
		CHEN et al., "The Role of Cytoplasmic Deoxycytidine Kinase in the Mitochondrial Effects of the Antihuman Immunodeficiency Virus Compound 2',3'-Dideoxycytine," <u>J Biol Chem</u> , February 15, 1992, 267(5), 2856-2859.	
2		CUI et al., "Effect of Nucleoside Analogs on Neurite Regeneration and Mitochondrial DNA Synthesis in PC-12 Cells," J. of Pharmacology and Experimental Therapeutics, 1997, 280(3), 1228-1234.	
	, ,	DAVIS et al., "In Situ Localization of Mitochondrial DNA Replication in Intact Mammalian Cells," <u>J Cell Biol</u> , 1996, 135, 883-893.	
		DAVISSON, et al., "Synthesis of Nucleotide 5'-Diphosphates from 5'-O-Tosyl Nucleosides," J. Org. Chem., 52(9), 1794-1801 (1987)	
		DOONG et al., "Inhibition of the replication of hepatitis B virus in vitro by 2',3'-dideoxy-3'-thiacytidine and related analogues," Proc. Natl. Acad. Sci., October 1991, 88, 8495-8499.	
		DU et al, Synthesis, "Anti-Human Immunodeficiency Virus and Anti-Hepatitis B Virus Activities of Novel Oxaselenolane Nucleosides," J. of Med. Chem., (40)19, 2991-2993 (September 12, 1997).	

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Signature	Considered

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		DUTSCHMAN et al., "Metabolism of 2',3'-dideoxy-2',3'-didehydro-β-L-(-)-5-Fluorocytidine and Its Activity in Combination with Climically Approved Anti-Humna Immunodeficiency Virus β-D-(+) Nucleoside Analogs In Vitro," Antimicrobial Agents and Chemotherapy, July 1998, 42(7), 1799-1804.	
		FURMAN, et al., "The Anti-Hepatitis B Virus Activities, Cytotoxicities, and Anabolic Profiles of the (-) and (+) Enantiomers of cis-5-Fluoro-1-[2-(Hydroxymethyl)-1,3-oxathiolane-5-yl]-Cytosine" Antimicrobial Agents and Chemotherapy, 36(12) 2686-2692 (December 1992).	
-		GLONEK, et al. "Full anhydrization of methylenediphosphonic acid and of phosphoric acids by a carbodiimide" Inorg.Chem., 1975 Vol. 14 (7); 1597-602.	
		GOSSELIN, G. et al. "Synthesis and Antiviral Evaluation of β-L-Xylofuranosyl Nucleosides of the Five Naturally Occurring Nucleic Acid Bases", <i>Journal of Heterocyclic Chemistry</i> , 1993, 30 (OctNov.), 1229-1233.	
	0	HERNANDEZ-SANTIAGO et al., "Pharmacology of β-L-Thymidine and β-L-2'-Deoxycytidine in HepG2 Cell and Primary Human Hepatocytes: Relevance to Chemotherapeutic Efficacy against Hepatitis B Virus," Antimicrobial Agents and Chemotherapy, June 2002, 46(6), 1728-1733.	
		HOARD, et al., "Conversion of Mono- and Oligodeoxyribonucleotides to 5'-Triphosphates," J. Am. Chem. Soc., 87(8), 1785-1788 (1965).	
		HOLY. "Nucleic Acid Components and Their Analogs. CLIII. Preparation of 2'-deoxy-L-Ribonucleosides of the Pyrimidine Series," Collect. Czech. Chem. Commun. (1972), 37(12), 4072-87.	
		HOSTETLER, K.Y., et al. "Greatly Enhanced Inhibition Of Human Immunodeficiency Virus Type 1 Replication In CEM And HT4-6C Cells By 3'-Deoxythymidine Diphosphate Dimyristoylglycerol, A Lipid Prodrug Of 3'-Deoxythymidine." (September 1992) Antimicrob Agents Chemother. 36:2025-2029.	
,		HOSTETLER, K.Y., et al. "Synthesis And Antiretroviral Activity Of Phospholipid Analogs Of Azidothymidine And Other Antiviral Nucleosides." (April 15, 1990) J. Biol Chem. 265(11):6112-7.	
		IMAI et al., "Studies on Phosphorylation. IV. Selective Phosphorylation of the Primary Hydroxyl Group in Nucleosides." J. Org. Chem., 34(6), 1547-1550 (June 1969).	
		JONES, R. et al., "Mini Review: Nucleotide prodrugs," Antiviral Research, 27, 1-17 (1995).	

Examiner	Date	
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	,	JUROVČIK and HOLY "Metabolism of pyrimdine L-nucleosides," <u>Nucleic Acids Research</u> , August 1976, 3(8), 2143-2153.	
		KORBA et al., "A cell culture assay for compounds which inhibit hepatitis B virus replication," Antiviral Res., 15:217 (1991).	
		KRAYEVSKY and CHERNOV, "Can a Substrate Enantiomer Be a Substrate for the Same Enzyme?," Molecular Biology, 1996, 30(5), 585-591.	
		KRAYEVSKY and CHERNOV, "Should the Asymmetric of Enzymatic Active Centers Always Correlate with the Asymmetry of their Substrates?," J. of Bionolecular Structure & Dynamics, 1996, 14(2), 225-230.	
		KUCERA, L.S., et al "Novel membrane-interactive ether lipid analogs that inhibit infectious HIV-1 production and induce defective virus formation." AIDS Res Hum Retroviruses. 6:491-501 (May 1990).	
		LABENZ et al., "Analysis of the TK Enzyme Complex Induced by HSV Types 1 and 2 by Means of Isoelectric Focusing and Polyacyrlamide Gel Electrophoresis," Arch Virol, 1982, 71, 235-249.	
		LIN et al., "Design and Synthesis of 2',3'-Dideoxy-2', 3'-didyhydro-β-L-cytidine (β-L-Fd4C), Two Exceptionally Potent Inhibitors of Human HBV and Potent Inhibitors of HIV <i>In Vitro</i> ," <i>J. Med. Chem.</i> , 39(9), 1757-1759 (April 26,1996).	
		LIN et al., "Synthesis and Biological Evaluation of 2',3'-Dideoxy-L-pyrimidine Nucleosides as Potential Antiviral Agents agains HIV and HBV," J. Med. Chem. 1994, 97, 798-803.	
		LIN et al., "Synthesis of Several Pyrimidine L-Nucleoside Analogues as Potential Antiviral Agents," Tetrahedron Letters, Vol. 51(4), 1055,1068 (1995).	
		MAGA et al., "Lack of stereospecificity of suid pseudorabies virus thymidine kinase," <i>Biochem. J.</i> , 294(2), 381-385 (September 1, 1993).	
		MANSOUR et al., "Stereochemical Aspects of the Anti-HCMV Activity of Cytidine Nucleoside Analogues," Antiviral Chemistry & Chemotherapy, 6(3), 138-142 (1995).	
	 	Morris S. Zedeck et al. Pseudomonas testosteroni, Mol. Phys. (1967), 3(4), 386-95.	
		NAKAYAMA, C., et al., "Synthetic Nucleosides and Nucleotides. XX. Synthesis of Various 1-β- Xylofuranosyl-5-Alkyluracils and Related Nucleosides." Nucleosides, Nucleotides, 1, 139-146 (1982)	

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		NORBECK, Tetrahedron Letters, 30 (46), 6246 (1989)	
		PANKIEWICZ. et al. "Efficient synthesis of methylenebis(phosphonate) analogues of P1,P2-disubtituted phyrophospates of biological interest. (1997-04-15), 119, 3691-3692.	
		PANKIEWICZ. et al. "Synthesis of methylenebis(phosphonate) analogs of ADP Ribose" Collect. Czech. Chem. Commun. (1996-09-23), 61; S92-S-95.	
		PAN-ZHOU et al., "Differential Effects of Antiretroviral Nucleoside Analogs on Mitochondrial Function in HepG2 Cells," Antimicrobial Agents and Chemotherapy, March 2000, 44(3), 496-503.	
		PLACIDI et al., "Cellular pharmacology of β-L-thymidine and β-L-2'-deoxycytidine in HepG2 cells and primary rat, monkey and human hepatocytes," 3 rd Int. Conf. Ther. Vir. Hepatitis, abstr. A122, 1999 [Antivir. Ther. 4, Suppl. 4].	,
	·	ROBINS, "Selective Deoxygenation and Modification at C2' of Nucleosides," Nucleic Acids Research Symposium Series, Vol. 11, Pages 1-4, Kyoto, Japan, November 24-26, 1982, A.E. Pritchard (ed.), IRL Press, Ltd., Oxford, England, 1982;	×
		ROBINS, M. J. et al. "Purine nucleosides. XXIX. The synthesis of 2'-deoxy-L-adenosine and 2'-deoxy-L-guanosine and their alpha anomers." J. Org. Chem. March 1970, 35, 636-639.	
		ROBINS, M.J., et al., "Nucleic Acid Related Compounds. 42. A General Procedure for the Efficient Deoxygenation of Secondary Alcohols. Regiospecific and Stereoselective Conversion of Ribonucleosides to 2'-Deoxynucleosides." J. Am. Chem. Soc. 105, 4059-4065 (1983).	
		SANEYOSHI, M., et al., "Synthetic Nucleosides and Nucleotides. XIII. Stannic Chloride Catalyzed Ribosylation of Several 6-Substituted Purines." Chem. Pharm. Bull., 27, 2518-2521 (1979).	
		SCHINAZI, et al., "Selective Inhibition of Human Immunodeficiency Viruses by Racemates and Enantiomers of cis-5-Fluoro-1-[2-(Hydroxymethyl)-1,3-Oxathiolane-5-yl] Cytosine," Antimicrobial Agents and Chemotherapy, 36(11), 2423-2431 (1992).	-
		SCHINAZI, et al., "Effect of Combinations of Acylovir with Vidarabine or its 'Monophosphate on Herpes Simplex Viruses in Cell Culture and in Mice," Antimicrobial Agents and Chemotherapy, 22(3), 499, (1982).	

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		SHUTO, S., et al. "A facile one-step synthesis of 5'-phosphatidylnucleosides by an enzymatic two-phase reaction." <i>Tetrahedron Letters</i> . 28. 199-202 (1987).	
		SODERLUND and ARNER, "Mitochondrial versus Cytosololic Activities of Deoxyribonucleoside Salvage	Γ
	- X -	Enzymes," Purine and Pyrimidine Metabolism in Man VIII, A.Shota & M. Taylor (ed.), Plenum Press, New York, 1995, 201-204,	
		SPADARI et al., "L-Thymidine is Phosphorylated by Herpes Simplex Type 1 Thymidine Kinase and Inhibits Viral Growth," J. Med. Chem. (1992), 35(22), 4214-4220.	
		TYRSTED et al. "Inhibition of the synthesis of 5-phosphoribosyl-1-pyrophosphate by 3'-deoxy-adenosine and structurally related nucleoside analogs." <i>Biochim. Biophys. Acta.</i> (February 26, 1968), 155(2), 619-22.	
		VERRI et al. "Lack of enantiospecificity of human 2'-deoxycytidine kinase: relevance for the activation of beta-L-deoxycytidine analogs as antineoplastic and antiviral agents." <i>Molecular Pharmacology</i> . (January 1997), 51(1), 132-138.	
	·	VERRI et al., "Relaxed Enantioselectivity of Human Mitochondrial Thymidine Kinase and Chemotherapeutic Uses of L-Nucleoside Analogues," <i>Biochem. J.</i> (1997), 328(1), 317-320 (November 15, 1997).	
		von JANTA-LIPINSKI et al., "Newly Synthesized L-Enantiomers of 3'-Fluoro-Modified β-2'-	Γ
		Deoxyribonucleoside 5'-Triphosphates Inhibit Hepatitis B DNA Polymerase but not the Five Cellular DNA Polymerases α , β , γ , δ , and ε Nor HIV-1 Reverse Transcriptase," J. Medicinal Chemistry, 41(12), 2040-2046 (June 4, 1996).	
		Wang, S., Montelaro, R., Schinazi, R.R., Jagerski, B. and Mellors, J.W.: Activity of nucleoside and non-nucleoside reverse transcriptase inhibitors (NNRTI) against equine infectious anemia virus (EIAV). First National Conference on Human Retroviruses and Related Infections, Washington, DC, Dec. 12-16, 1993	
		ZEDECK et al. "Pseudomonas testosteroni," Mol. Phys. (1967), 3(4), 386-95.	
		ZHANG, W., et al. "Removal of Silyl Protecting Groups from Hydroxyl Functions with Ammonium Fluoride in Methanol." <i>Tetrahedron Letter.</i> , 33, 1177-1180 (192).	

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				Application Number	09/883,033
	PLEMENTAL		<u> </u>	Filing Date	June 15, 2001
INFORMATION DISCLOSURE				First Named Inventor	Jean-Pierre Sommadossi et al.
STA	STATEMENT BY APPLICANT		ICANT	Group Art Unit	1623
	(use as many sheets	as necessa	ry)	Examiner Name	Howard V. Owens, Jr.
Sheet	9	of	9	Attorney Docket Number	06171.105026 (IDX 1005 US)

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		ZHU et al., "Anti-Hepatitis B Virus Activity and Metabolism of 2',3'-dideoxy-2',3'-didehydro-β-L-(-)-5-Fluorocytidine," Antimicrobial Agents and Chemotherapy, July 1998, 42(7), 1805-1810.			
		ZHU et al., "Incorporation of Nucleoside Analogs into Nuclear or Mitochondrial DNA Is Determined by the Intracellular Phosphorylation Site," J Biol Chem, 2000, 275(35), 26727-26731.			
		ZHU et al., "Inhibition of Replication of Hepatitis B Virus by Cytallene In Vitro," Antimicrobial Agents and Chemotherapy, August 1997, 41(8), 1755-1760.			

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